

REMARKS

Claims 55-77 are pending in this application. Applicant has amended claim 55 to overcome the rejection under 35 U.S.C. § 103 presented in the Official Action dated April 16, 2002. Claims 57-60 have been amended to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has added new claims 63-79. No new matter is introduced by the amended claim or in the new claims.

Restriction Requirement

The examiner had imposed a restriction of the claims but has withdrawn the restriction in the Official Action dated April 16, 2001 because of claim format. Applicant herein traverses the imposition of a restriction requirement in regard to the claims pending in this application.

Restriction under 35 U.S.C. 121 and 37 C.F.R. 1.141(a) is proper only if "two or more **independent and distinct** inventions are claimed in one application."¹ Restriction by the Commissioner regarding a patent application is permissible; restriction is never required on the part of the Commissioner.²

Restriction is discretionary with the examiner and must be evaluated on a case-by-case basis. These are two basic reasons for requiring division of allegedly "independent" and "distinct" inventions present in a single application: The

¹ The Commissioner interprets this requirement as authorizing restriction if the inventions are independent or distinct.

² "If two or more independent and distinct inventions are claimed in one application, the Commissioner may require the application to be restricted to one of the inventions..." 35 U.S.C. 121.

governmental interest in obtaining proper³ revenue from filing and issue fees for each application and, the interest in maintaining the integrity of the classification system for examining applications. Ex parte Yale, 1869 C.T. 110 (Comm'r.Pat. 1869). These governmental interests must be weighed against the standards set forth in the applicable law, the stated regulations and the underlying policies, as well as against a particular applicant's interests, in order to ensure a just result.

A. The Examiner Must Meet His Burden To Show That The Claims Constitute Independent And Distinct Inventions

The terms "independent" and "distinct" have separate and different meanings. M.P.E.P. 802.01. As used in 35 U.S.C. 121, an "independent" invention means an invention which is "not dependent"; this means "that there is no disclosed relationship between the two (2) or more subjects disclosed, that is, they are unconnected in design, operation or effect." M.P.E.P. 802.01, ¶ 6. A product and a method used in assembling the product are, by definition, dependent - - there is an intimate relationship between the design and operation of a product and a method for assembling that product. M.P.E.P. 802.01.

Inventions are distinct if they are both (1) capable of separate manufacture, use, or sale as claimed and (2) patentable over each other. M.P.E.P. 802.01 ¶7. The inventions defined by the two (2) claim groups posited by the examiner cannot be considered to be distinct. A product and the method for its assembly cannot be the

³ As discussed below, "proper revenue" does not mean as much revenue as possible by issuing improper division or restriction requirements; rather, "proper revenue" means just compensation for examining a patent application with respect to each truly independent and distinct invention.

subject of separate manufacture or use. Similarly, a product and the method for assembly of the product, which is the characterization the examiner has used in segregating the claims into two (2) groups, clearly can never be patentable one over another. This being the case, the claimed groups of inventions in the instant application are not distinct, just as they are not dependent.

Every requirement to restrict has two aspects: The reason(s) why the inventions as claimed are either independent or distinct; and, the reason(s) for insisting upon restriction therebetween." M.P.E.P. 808. This two-prong analysis was adopted by the Patent Office in 1975. See Notice of April 9, 1975, 934 O.G. 450.

In the immediate case, in her initial restriction, the examiner has classified the claims of Group I, 55-58 and 62, as "drawn to the product", classified in class 74, subclass 594.1" and the claims of Group II, 60, and 61 (wherein the independent method claim 59 from which they depend would be classified) as "drawn to the method of assembly, classified in Class 29, subclass 888.08." However, a mere showing of a separate Patent and Trademark Office classification for the respective groups of claims or inventions in question is not conclusive on the issue of restriction. Application of Young, 173 F.2d 239, 81 USPQ 139.

Applicant respectfully submits that the examiner had misread either the claims at issue or the Manual of Classification defining the field in which the examiner will search. Class 74 is for "machine elements or mechanisms" and subclass 594 thereof is for "bearings, adjustable". Applicant readily concedes that this would appear to be an appropriate class and subclass for searching with respect to applicant's claims pending in the application, both the product claims and the method of product assembly claims.

Class 29 is for "metal working" and subclass 888.08 thereof is for "crank shaft making". Applicant's invention is not concerned with metal working. The only language in the claims which might be construed to relate to some sort of metal working is the language in claim 55 reciting that the crank axle is a continuous, monolithic thin-walled tubular structure. It should be noted that this does not speak to the method of manufacture of the crank axle and that the crank axle as defined in claim 55 could be of any material, not necessarily metal. It is further noted that claim 58 limits claim 55 by requiring that the tubular members are injection molded of aramid fiber composite material. This is clearly not metal and, consequently, at least with respect to claim 58, metal working would be the wrong area in which searching should be performed. This is a further reason that the restriction requirement should be reconsidered and withdrawn.

Having classified the claims into two different statutory categories, the examiner then applied M.P.E.P. § 806.05(h) to determine that the claims of Group I and Group II purportedly constitute distinct inventions. M.P.E.P. § 806.05(h) provides that

A product and a process of using the product can be shown to be distinct inventions if either or both of the following can be shown: (A) the process of using as claimed can be practiced with another materially different product; or (B) the product as claimed can be used in a materially different process.

The examiner reasoned that "inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. 806.05(h)). In the

instant case, the method of assembly as claimed could be practiced with another materially different product, other than a bicycle crank set."

M.P.E.P. 806.05(h) explicitly states that "the burden is on the examiner to provide an example, but the example need not be documented." In this case, the examiner has not provided any example to document or support the examiner's conclusion that the method of assembly as claimed could be practiced with another materially different product such as "not a bicycle crank set". The requirement for the examiner to present an example mandates an affirmative presentation. The examiner cannot simply say that the method could be practiced with a materially different product which is not the bicycle crank set claimed. Hence, the examiner has not met the examiner's burden of documenting by example how the method of assembly of the bicycle crank set, as such method is claimed, could be used on another product which materially differs from a bicycle crank set.

Furthermore, the M.P.E.P. makes it crystal clear that before restriction can be required, there must be a showing that the inventions, each of which is defined by one or more claims, must be both "independent" and "distinct" from one another. In the instant case, no such showing has been made by the examiner.

A showing that two inventions are "distinct", as the examiner purports to have made in the Official Action, does not obviate the requirement to also make a showing that the inventions are "independent."

The inventions described by applicant are not independent. To be independent, inventions must have

**no disclos d relationship betw n the two or more subj cts
disci sed, that is, they ar unconnected in design, operation or
effect. M.P.E.P. 802.01.**

The very language of the claims at issue reveals a clear interconnection and design, operation and effect between the bicycle crank set claims and the method of assembly of a bicycle crank set claims. Indeed, it stretches the imagination to find two subjects which are more closely connected in design, operation and effect than a product consisting of a number of interconnected and interrelated parts and the method of assembling those parts so that those parts attain the desired interconnected and interrelated postions.

Even if two patent application claims are patentably distinct from one another, this does not ipso facto mean that restriction should be required. There are two criteria which must exist in order that a requirement for restriction be proper as between patentably distinct inventions: First, the inventions must be independent or distinct as claimed; second, there must be a serious burden on the examiner if restriction is not required. M.P.E.P. 803. If the search and examination of the an entire application can be made without serious burden, the examiner must examine the application on its merits, in its entirety, even though the application includes claims to distinct or independent inventions. M.P.E.P. 803.

**B. Practical And Equitable Considerations Mandate
Review Of Applicant's Claims As A Single Application**

A close examination of the practical and equitable considerations surrounding the present case bars an imposition of a restriction requirement and requires examination of all the claims presented by applicant in a single patent application.

1. Scope Of Search

The salient consideration for insisting upon restriction and determining the propriety of a restriction requirement is the scope of the examiner's search for prior art. Applicant is entitled to a full and thorough search of the prior art as a consequence of having filed his application and having paid the statutory application fee. 35 U.S.C. 131.

Restriction is proper only where the examiner would be unduly burdened by searching numerous, unrelated inventions or technologies. Thus, the scope of a search for related inventions, even though burdensome, cannot justify restriction of the related inventions. Further, even if an application includes claims to unrelated inventions, i.e., distinct and independent, the examiner **must** examine the application on its merits, in its entirety, if the search and examination of the entire patent application can be made without a serious burden on the examiner. M.P.E.P. 803.

The examiner's instructional guidelines for performing such a search for any application are set forth in the M.P.E.P. The guidelines compel the examiner to search in classes and subclasses in which independent and distinct (as defined by the M.P.E.P.) inventions would be classified. For example, section 904.01(c) recites:

"Not only must the art be searched with which the invention claimed is classifiable, but also all analogous arts **regardless of where classified**. The determination of when arts are analogous is at times difficult. It depends upon the necessary essential function or utility of the subject matter covered by the claims, and not upon what it is called. (emphasis added).

Section 904.01(d) recites:

A proper field of search includes the subclass in which the claimed subject matter of an application would be properly classified.

In outlining a field of search the examiner should note every class and subclass under the U.S. Patent Classification system and other organized systems of literature, **that may have material pertinent to the**

subject matter as claim d. Every subclass, digest and cross reference art collection pertinent to each type of invention claimed should be listed, from the largest combination through the various subcombinations to the most elementary part. **Th search should extend to all probabl ar as relevant to the claimed subject matter and should cover the disclosed features which might reasonably be expected to be claimed.**

The examiner should plan a search that not only covers the claimed subject matter, but one that also covers the disclosed features that might reasonably be expected to be claimed. (emphasis added).

Section 904.02 recites:

It is a prerequisite to a speedy and just determination of the issues involved in the examination of an application that a careful and comprehensive search, commensurate with the limitations appearing in the most detailed claims in the case, be made in preparing the first action on the merits so that the second action on the merits can be made final or the application allowed with no further searching other than to update the original search. It is normally not enough that references be selected to meet only the terms of the claims alone, especially if only broad claims are presented; **but the search should, insofar as possible, also cover all subject matter which the examiner reasonably anticipates might be incorporated into applicant's amendment.**

It thus results that the examiner finds references that, while not needed for treating the claims, would be useful for forestalling the possible presentation of claims to other subject matter regarded by applicant as his or her invention, and claimable with the subject matter being currently claimed, but shown to be old by these references. (emphasis added).

From the above-quoted guidelines, it is clear that the scope of a proper search includes:

- (1) Classes and subclasses in which the claimed subject matter is classified;
- (2) Classes and subclasses that may have material pertinent to the claimed subject matter; and
- (3) Classes and subclasses containing subject matter present in the disclosure which might reasonably be expected to be claimed during the prosecution; and,

(4) Classes and subclasses that may contain subject matter disclose material related to features which might reasonably be expected to be claimed.

Therefore, only where inventions are independent and distinct (as defined by the M.P.E.P.), and require nonoverlapping searches, is restriction proper.

The disclosed and claimed bicycle crank set and methods for assembly of a bicycle crank set are interrelated and merit patent protection. They are all directed to a common technology, i.e., bicycles and the assembly and fabrication thereof, and stem from a set of core inventive concepts. Thus, the examiner will not be unduly burdened by searching and examining all of the claims presented by applicant in a single application. The examiner's search will not be narrowed or reduced by compliance with the restriction requirement, since applicant has clearly manifested his intent to claim each novel and nonobvious aspect of the invention as evidenced by the claims in the application.

The search performed by the examiner will be of the same scope whether the examiner searches respecting the bicycle crank claims or the method of assembly of a bicycle crank claims. In evaluating the patentability of a claim for a method for assembly of a bicycle crank, an examiner will go right to the class and subclasses for bicycle crank apparatus. Likewise, when evaluating the patentability of a claim directed to a bicycle crank, the examiner will go to the class and subclasses for bicycle cranks. Hence, the searches to be performed for the two (2) groups of claims defining the two inventions will be identical. As such, it would be a total waste of time, money and energy to require the examiner to perform the same search twice. This alone should be

sufficient to bar an imposition of a restriction requirement and to proceed with a meritorious examination of all of the claims pending in the application.

**2. Cost To Applicant of the Proposed
Restriction Would Be Unduly Burdensome**

While the Patent and Trademark has a legitimate interest in obtaining proper revenue from filing and issuance fees, it does not have unrestrained power to tax inventive. Applicant is entitled to obtain patent protection on each of the nonobvious invention aspects of the bicycle crank set and bicycle crank set assembly method which applicant has disclosed. If the applicant, an individual inventor, is forced to divide this application into two separate patent applications as suggested by the examiner, applicant will be unduly and unfairly burdened with excessive fees and costs associated with prosecuting and maintaining an additional patent.

a) Government Fees Will Nearly Double

If applicant is forced to divide the present application into two separate patent applications as suggested by the examiner, applicant will pay a minimum of over \$7,970.00 in government fees to apply for, receive and maintain two separate patents, an increase of over \$3,810.00 over the expected fees for a single application. This additional expense is unreasonably burdensome for an individual inventor for an invention which has yet to be commercialized.

The following Table 1 illustrates the additional official fees which would be generated in the event the 2-way restriction requirement for the instant application is maintained and one (1) divisional application is filed:

TABLE 1

| | | |
|----|---|------------------|
| A) | Original non-refundable filing fee (including preliminary amendment) | \$ 370.00 |
| B) | Issue fees | \$ 640.00 |
| C) | Maintenance fees | |
| | i) 3.5 years | \$ 440.00 |
| | ii) 7.5 years | \$1010.00 |
| | iii) 11.5 years | \$1450.00 |
| D) | Recording assignment | \$ 40.00 |
| | TOTAL | \$3950.00 |

Undoubtedly this will increase in time as the Patent & Trademark Office increases its fees.

**3) The Patent Office's First Responsibility Is
Public Service, Not Collecting Revenue**

While applicant recognizes the Patent & Trademark Office's interest in obtaining proper revenue from filing and issuance fees, the Patent & Trademark Office is not in the business of assisting the IRS in reducing the national debt. The sole function of the Patent & Trademark Office is to serve the public in an efficient and expeditious manner. The Patent & Trademark Office is charged with a duty to carry out its responsibility of examining patent applications in a manner most efficient to the public. Efficient use of administrative resources and expeditious processing of this application will be better served by performing one comprehensive search as contrasted to two separate searches.

For all of the foregoing reasons, applicant respectfully submits that a restriction requirement if imposed in this application will not be well-founded. All of the claims

pending in the application should be examined collectively following a single, comprehensive search of the prior art.

The Examiner's Objection to the Drawings

The examiner has objected to the drawings in Figures 6 and 20. Applicant herein submits the corrections to the drawings marked in red for approval by the examiner.

The Examiner's Rejection Under 35 U.S.C. § 112, Second Paragraph

The examiner has rejected claims 57-60 as allegedly being indefinite and failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

Applicant has amended claim 55 to eliminate the alleged antecedent basis problem in claim 57.

Applicant had submitted on November 1, 2001 a set of claims which inadvertently omitted claim 59. Applicant submitted on July 15, 2002, a response, correcting the omission of claim 59 discussed in the detailed action dated June 14, 2002. Claims 60 and 61, which depend from claim 59, are now in proper form.

Applicant submits the 35 U.S.C. § 112 rejection should be withdrawn.

The Examiner's Rejection of Claims 55-58 Under 35 U.S.C. § 103(a)

Claims 55-58 are rejected based on 35 U.S.C. § 103(a), as allegedly being unpatentable over U.S. patent 846,239 ('239) to Osborne in view of Smith et al., U.S. patent 6,314,834 ('834).

Applicant has amended claim 55 to recite that the inner and outer sleeves of the coupling extend internally and externally about the first and second tubular members in a substantially parallel arrangement. This feature is important because it is the sleeve

design of the coupling which "sandwiches" the first and second tubular members together (page 8, lines 19 – 24, and Figure 2 of the application). Additionally, new claim 64 (as well as allowed claim 62) recites the movement of a bushing which causes the inner sleeve to move outward to "sandwich" the first and second tubular members together as recited in claim 55. These features are not disclosed nor discussed nor suggested in any of the prior art cited by the examiner.

Applicant respectfully submits the obviousness rejection of claim 55 should be withdrawn. Applicant further submits that the rejections of claims 56-58 should be withdrawn as they depend from claim 55; a claim which depends from an allowed base claim should be allowed.

CONCLUSION

Applicant fully appreciates the examiner's assertions regarding alleged obviousness of claims 55 though 58 filed in the parent application. However, in consideration of the amendments and argument presented herein, the rejections should be withdrawn.

It is believed that all the claims in this application are in condition for allowability as the present invention is clearly an advance over the prior art. Therefore, it is now believed by applicant the rejections have been overcome and it is now requested the application should thus proceed to allowance and issue.

If further questions remain concerning this application, the examiner is invited to contact the undersigned attorney to resolve any remaining issues.

Respectfully submitted,

Date: 13 September 02



CHARLES N. QUINN
Registration No. 27,223
Attorney for Applicant

Fox, Rothschild, O'Brien & Frankel LLP
2000 Market Street, 10th Floor
Philadelphia, PA 19103
Tel: 215-299-2135
Fax: 215-299-2150
email: cquinn@frof.com

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BY: Rhonda Bryant

DATE: 13 SEPTEMBER 2002